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#6



OIPE

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/082,973 DATE: 08/23/2002  
TIME: 12:04:48

Input Set : N:\Crf3\RULE60\10082973.raw  
Output Set: N:\CRF3\08232002\J082973.raw

1 <110> APPLICANT: Norris et al.  
2 <120> TITLE OF INVENTION: TISSUE-SPECIFIC AND TARGET RNA-SPECIFIC RIBOZYMES  
3 <130> FILE REFERENCE: 9175-010  
4 <140> CURRENT APPLICATION NUMBER: 10/082,973  
5 <141> CURRENT FILING DATE: 2002-02-26  
7 <150> PRIOR APPLICATION NUMBER: US/09/338,942  
8 <151> PRIOR FILING DATE: 1999-06-24  
11 <150> PRIOR APPLICATION NUMBER: 60/090,560  
12 <151> PRIOR FILING DATE: 1998-06-24  
13 <150> PRIOR APPLICATION NUMBER: 60/096,502  
14 <151> PRIOR FILING DATE: 1998-08-14  
15 <160> NUMBER OF SEQ ID NOS: 52  
16 <170> SOFTWARE: FastSEQ for Windows Version 3.0

ENTERED

18 <210> SEQ ID NO: 1  
19 <211> LENGTH: 492  
20 <212> TYPE: DNA  
21 <213> ORGANISM: Artificial Sequence  
22 <220> FEATURE:  
23 <223> OTHER INFORMATION: ARN promoter  
24 <400> SEQUENCE: 1  
25 actcgcggat catcttcacc atcgcccgca actcctgcgg gatatacctcg tctcctcct 60  
26 ccaccggcac ccccatgta gcggccagct cgcgccctgc ctgggaaagc tgtacatgct 120  
27 gatcggcggc gtcggtgccg gcggccgggt ctccgcctg ctcggcggtg ccggtccgtg 180  
28 cgcccttggc gtccgcggcg gcgcgcgatg agggcgccac ctgggtggtg atccagccac 240  
29 tgagggtaaa cattccagtc actccgggaa aaatggaatt ctccattgg atcgcccccac 300  
30 gcgtcgcaaa cttgagcccc ctttctgctg ccccttgaca gggtcgcaca ggtagtcgca 360  
31 gttgtttgac gcaagtcact gattggaac gccatcgcc tgcagaaat ggtcgttgcc 420  
32 agacctatgg ctggcaccg catcgcggt gcgtaccct tactcctgtt gtgcctttaa 480  
33 cctagcaagg ac 492

35 <210> SEQ ID NO: 2  
36 <211> LENGTH: 1113  
37 <212> TYPE: DNA  
38 <213> ORGANISM: Artificial Sequence  
39 <220> FEATURE:  
40 <223> OTHER INFORMATION: PROC promoter  
41 <400> SEQUENCE: 2  
42 aattcctcga agtccttgcg ctgcttgctg ttcatgatgt cgtagatcag cgcattgcacc 60  
43 tgcttggtgt ccagcggtag caggttgatc cggcgatcat cggcatccac ccggatcatg 120  
44 ggtggcaggc cggcgagag gtgcaggatc gaagcgccct gtttggcact gaagcgagc 180  
45 agctcggtaa tatccatggg actccccaat tacaagcaag caggtagaat gccgccaaag 240  
46 ccgccgtctc ggacaaggaa aacaccgat gagccagggt gcttccagga cacgcgtggt 300  
47 gtcctgcgcc agacgcggaa cctcgacact ggaacaggaa gatggccatc gaggccggcg 360  
48 gtttcgaggg cgtcgagccg acgccgaccg cactccata gggcgagggt aatgtccacg 420

## RAW SEQUENCE LISTING

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Input Set : N:\Crif3\RULE60\10082973.raw

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49      atagcagaga atattgcaaa ggttgccgcg cgcattccgtg aggcagcgca agctgcgggg      480
50      cgcgatccgg ccacggtcgg cctgctcgcc gtgagcaaga ccaagcccgc cgccgcgggtg      540
51      cgcgaggcgc acgcccgcgg ccttcgcgac ttggcgaaa actacctgca ggaggccctc      600
52      ggcaagcagg ccgaactggc cgacctgccc ttgaactggc acttcacggg ccccatccag      660
53      tcgaacaaga cgcggcccat cgccgagcat ttccagtggg tgcactcggg ggaccggttg      720
54      aagatcgcgc agcgcctgtc ggagcaacgc ccggccgggc tgccgcccct gaatgtctgc      780
55      ctgcaggtea acgtcagcgg cgaagccagc aagtccggct gcgccccga ggacctgccg      840
56      gccctggccg aggcctgtaa gcaactgccc aacctccgat tgcgtggcct gatggccatc      900
57      cccgaaccca ccgccgaacg cgccgcgcaa cacgcgcgt tcgccgcct gcgcgaactg      960
58      ctgctggacc tgaaccttg cctggacacc ctgtccatgg gcatgagcga cgacctcgag      1020
59      gcagccatcg gcgaaggtgc gacctgggtc cgcattcggt cgcacctgtt cggcgcgcgc      1080
60      gactacggcg cgccggttc ttgaatgaat ccc                                     1113
62 <210> SEQ ID NO: 3
63 <211> LENGTH: 66
64 <212> TYPE: DNA
65 <213> ORGANISM: Artificial Sequence
66 <220> FEATURE:
67 <223> OTHER INFORMATION: ARC promoter
68 <400> SEQUENCE: 3
69      ctagagctat tgatgtggat caacattgtc cactagccgc tgccgcctaa tctccagaat      60
70      tgtgag                                     66
72 <210> SEQ ID NO: 4
73 <211> LENGTH: 685
74 <212> TYPE: DNA
75 <213> ORGANISM: Artificial Sequence
76 <220> FEATURE:
77 <223> OTHER INFORMATION: UPCM2 cassette sequence
78 <400> SEQUENCE: 4
79      tcagaaaatt attttaaatt tccaattgac attgtgagcg gataacaata taatgtgtgg      60
80      aagcttatcg ataccgtcga cctcgaagct ttggaacct gatgagtcgg tgaggacgaa      120
81      acgatgacat tctgctgacc agattcacgg tcagcagaat gtcacgtcgc gttccaggat      180
82      ccggctgcta acaaagccc aaaggaagct gagttggctg ctgccaccgc tgagcaataa      240
83      ctagcataac cccttggggc ctctaaacgg gtcttgaggg gttttttgct gaaaggagga      300
84      actatatccg gatatcccgc aagaggcccg gcagtaccgg cataaccaag cctatgccta      360
85      cagcatccag ggtgacgggt ccgaggatga cgatgagcgc attgttagat ttcatacacg      420
86      gtgcctgact gcgttagcaa tttaactgtg ataaactacc gcattaaagc ttatcgatga      480
87      taagctgtca aacatgagaa ttcggcgtat acgccgaatt tcaagggctc gcgcaacgac      540
88      gacgatgagg taccacatcg tcgtcgttgc gactgatga ggccgtgagg ccgaaacct      600
89      tgacgcgtaa aaaaaacccg ccccgcgggg ttttttacc ttccatgcg gccgctctag      660
90      tcgagggggg gcccgctaga actag                                     685
92 <210> SEQ ID NO: 5
93 <211> LENGTH: 673
94 <212> TYPE: DNA
95 <213> ORGANISM: Artificial Sequence
96 <220> FEATURE:
97 <223> OTHER INFORMATION: P2CM2 cassette sequence
98 <400> SEQUENCE: 5
99      agaaagcaaa aataaatgct tgacactgta gcgggaaggc gtataatgga attgtgagcg      60
100     gataacaatt cacaagctta tcgataccgt cgacctcgag ctttggaacc ctgatgagtc      120

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101	cgtgaggacg aaacgatgac attctgctga ccagattcac ggtcagcaga atgtcatcgt	180
102	cggttccagg atccggctgc taacaaagcc cgaaaggaag ctgagttggc tgctgccacc	240
103	gctgagcaat aactagcata accccttggg gcctctaaac gggctctgag gggttttttg	300
104	ctgaaaggag gaactatata cggatatccc gcaagaggcc cggcagtacc ggcataacca	360
105	agcctatgcc tacagcatcc aggggtgacgg tgccgaggat gacgatgagc gcattgttag	420
106	atttcataca cgggtgcctga ctgctgttagc aatttaactg tgataaacta ccgcattaaa	480
107	gcttatcgat gataagctgt caaacatgag aattcggcgt atacgccgaa tttcaagggt	540
108	ctgcgcaacg acgacgatga ggtaccacat cgtcgtcgtt gcgcactgat gaggccgtga	600
109	ggccgaaacc cttgacgcgt aaaaaaacc cgccccggcg ggttttttac gcgttcctat	660
110	gcggccgctc tag	673
112	<210> SEQ ID NO: 6	
113	<211> LENGTH: 14	
114	<212> TYPE: DNA	
115	<213> ORGANISM: Artificial Sequence	
116	<220> FEATURE:	
117	<223> OTHER INFORMATION: primer	
118	<400> SEQUENCE: 6	
119	agctcgagct caga	14
121	<210> SEQ ID NO: 7	
122	<211> LENGTH: 17	
123	<212> TYPE: DNA	
124	<213> ORGANISM: Artificial Sequence	
125	<220> FEATURE:	
126	<223> OTHER INFORMATION: primer	
127	<400> SEQUENCE: 7	
128	tcgacggatc tagatcc	17
130	<210> SEQ ID NO: 8	
131	<211> LENGTH: 166	
132	<212> TYPE: DNA	
133	<213> ORGANISM: E. coli	
134	<400> SEQUENCE: 8	
135	agatctaaac gccgatctga tgagtccgtg aggacgaaac tttaaaaacc aaggagatct	60
136	aaacatctca ctgatgagtc cgtgaggacg aaacattacg aaaccaaagg agatctaaat	120
137	cattcacctg atgagtccgt gaggacgaaa ctttagcaaa ccaagg	166
139	<210> SEQ ID NO: 9	
140	<211> LENGTH: 378	
141	<212> TYPE: DNA	
142	<213> ORGANISM: E. coli	
143	<400> SEQUENCE: 9	
144	agatctaaaa aaaaacctga tgagtccgtg aggacgaaac tggttaaaag atctagatct	60
145	aaattatcca ctgatgagtc cgtgaggacg aaacgggcga aaagatctag atctaaatcg	120
146	ttacctgatg agtccgtgag gacgaaacta ccgaaaagat ctaatctaaa tgatgttctg	180
147	atgagtccgt gaggacgaaa ccacttaaaa gatctagatc taaattttcc actgatgagt	240
148	ccgtgaggac gaaacgtgca aaaagatcta gatctaattg ataccctgat gagtccgtga	300
149	ggacgaaaca gtcagaaaag atctagatct aaattcgttt ctgatgagtc cgtgaggacg	360
150	aaacaccaca aaagatct	378
152	<210> SEQ ID NO: 10	
153	<211> LENGTH: 162	
154	<212> TYPE: DNA	

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Input Set : N:\Crf3\RULE60\10082973.raw

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155 <213> ORGANISM: E. coli
156 <400> SEQUENCE: 10
157     agatctaaac gttagtctga tgagtccgtg aggacgaaac caacaaaacc aaggagatct      60
158     aaaggcatca ctgatgagtc cgtgaggacg aaactgttaa aaccaaggag atctaaacca      120
159     catcctgatg agtccgtgag gacgaaacag tttaaaccaa gg                          162
161 <210> SEQ ID NO: 11
162 <211> LENGTH: 162
163 <212> TYPE: DNA
164 <213> ORGANISM: E. coli
165 <400> SEQUENCE: 11
166     agatctaaaa gagcgtgat gagtccgtga ggacgaaaca gtcaaaacca aggagatcta      60
167     aatttcgata tgatgagtc gtgaggacga aaccagctaa accaaggaga lctaaacgat      120
168     ttctctgatg gtccgtgagg acgaaacatc accaaaccaa gg                          162
170 <210> SEQ ID NO: 12
171 <211> LENGTH: 56
172 <212> TYPE: DNA
173 <213> ORGANISM: E. coli
174 <400> SEQUENCE: 12
175     agatctaaat gcgtctgatg agtccgtgag gacgaaacag gcaggtaaaa ccaagg          56
177 <210> SEQ ID NO: 13
178 <211> LENGTH: 157
179 <212> TYPE: DNA
180 <213> ORGANISM: Streptomyces lividans
181 <400> SEQUENCE: 13
182     agatctaaac tcgtctgat gagtccgtga ggacgaaacg atcaaaacca aggagatcta      60
183     aagggcgctg atgagtccgt gaggacgaaa cgcgaaaacc aaggagatct aaagtactcc      120
184     tgatgagtc gtgaggacga aaccagcgaa accaagg          157
186 <210> SEQ ID NO: 14
187 <211> LENGTH: 168
188 <212> TYPE: DNA
189 <213> ORGANISM: Enterococcus faecalis
190 <400> SEQUENCE: 14
191     agatctaaaa ctaaatgctg atgagtccgt gaggacgaaa cgagttaaaa ccaaggagat      60
192     ctaaagttaa ataactgatg agtccgtgag gacgaaactt gttcaaaacca aggagatcta      120
193     aaacttttgc tgatgagtc gtgaggacga aacgtgtata aaccaagg          168
195 <210> SEQ ID NO: 15
196 <211> LENGTH: 162
197 <212> TYPE: DNA
198 <213> ORGANISM: Pseudomonas putida
199 <400> SEQUENCE: 15
200     agatctaaag gtccatctga tgagtccgtg aggacgaaac aaagcaaacc aaggagatct      60
201     aaacaggttc ctgatgagtc cgtgaggacg aaacaatgta aaccaaggag atctaaatcg      120
202     ctttctgatg agtccgtgag gacgaaacgt gataaaccaa gg                          162
204 <210> SEQ ID NO: 16
205 <211> LENGTH: 160
206 <212> TYPE: DNA
207 <213> ORGANISM: Streptomyces coelicolor
208 <400> SEQUENCE: 16
209     agatctaaag ctcgatctga tgagtccgtg aggacgaaac gaaccaaacc aaggagatct      60

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210      aaacgagtcc tgatgagtcc gtgaggacga aaccgggaaa ccaaggagat ctaaagtcga      120
211      tgctgatgag tccgtgagga cgaaacttcg caaaccaagg      160
213 <210> SEQ ID NO: 17
214 <211> LENGTH: 56
215 <212> TYPE: DNA
216 <213> ORGANISM: Staphylococcus warneri
217 <400> SEQUENCE: 17
218      agatctaaat gcgtctgatg agtccgtgag gacgaaacag gcaggcgaaa ccaagg      56
220 <210> SEQ ID NO: 18
221 <211> LENGTH: 38
222 <212> TYPE: DNA
223 <213> ORGANISM: Artificial Sequence
224 <220> FEATURE:
225 <223> OTHER INFORMATION: B2 consensus
226 <400> SEQUENCE: 18
227      tgctcttctg atgagtccgt gaggacgaaa ccgcctga      38
229 <210> SEQ ID NO: 19
230 <211> LENGTH: 39
231 <212> TYPE: DNA
232 <213> ORGANISM: Mus musculus
233 <400> SEQUENCE: 19
234      ttcaaagact gatgagtccg tgaggacgaa acgaggatc      39
236 <210> SEQ ID NO: 20
237 <211> LENGTH: 34
238 <212> TYPE: DNA
239 <213> ORGANISM: Mus musculus
240 <400> SEQUENCE: 20
241      gtccatctga tgagtccgtg aggacgaaac cggc      34
243 <210> SEQ ID NO: 21
244 <211> LENGTH: 36
245 <212> TYPE: DNA
246 <213> ORGANISM: HBV
247 <400> SEQUENCE: 21
248      attagagctg atgagtccgt gaggacgaaa caaacg      36
250 <210> SEQ ID NO: 22
251 <211> LENGTH: 37
252 <212> TYPE: DNA
253 <213> ORGANISM: HPV
254 <400> SEQUENCE: 22
255      gtcctgactg atgagtccgt gaggacgaaa cattgca      37
257 <210> SEQ ID NO: 23
258 <211> LENGTH: 44
259 <212> TYPE: DNA
260 <213> ORGANISM: Homo sapiens
261 <400> SEQUENCE: 23
262      tccgttgtct ctgatgagtc cgtgaggacg aaacatgaca ccga      44
264 <210> SEQ ID NO: 24
265 <211> LENGTH: 39
266 <212> TYPE: DNA

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VERIFICATION SUMMARY

DATE: 08/23/2002

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Input Set : N:\Crf3\RULE60\10082973.raw

Output Set: N:\CRF3\08232002\J082973.raw

L:480 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49

L:495 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50